

ABSTRACT

A method for forming metal lines in a semiconductor device is disclosed. An example method forms first metal lines and a first insulation layer on the first metal lines, etches the first insulation layer to expose the first metal lines, and deposits a conductive material into the etched portion of the first insulation layer to form contact plugs. The example method also forms a second insulation layer on the resultant structure, etches the second insulation layer to expose the contact plugs, deposits a material for cores into the etched portions of the second insulation layer to form the cores, and selectively removes the second insulation layer to expose the cores. In addition, the example method deposits second metal lines on both sides of the cores to branch current to both sides of the cores.